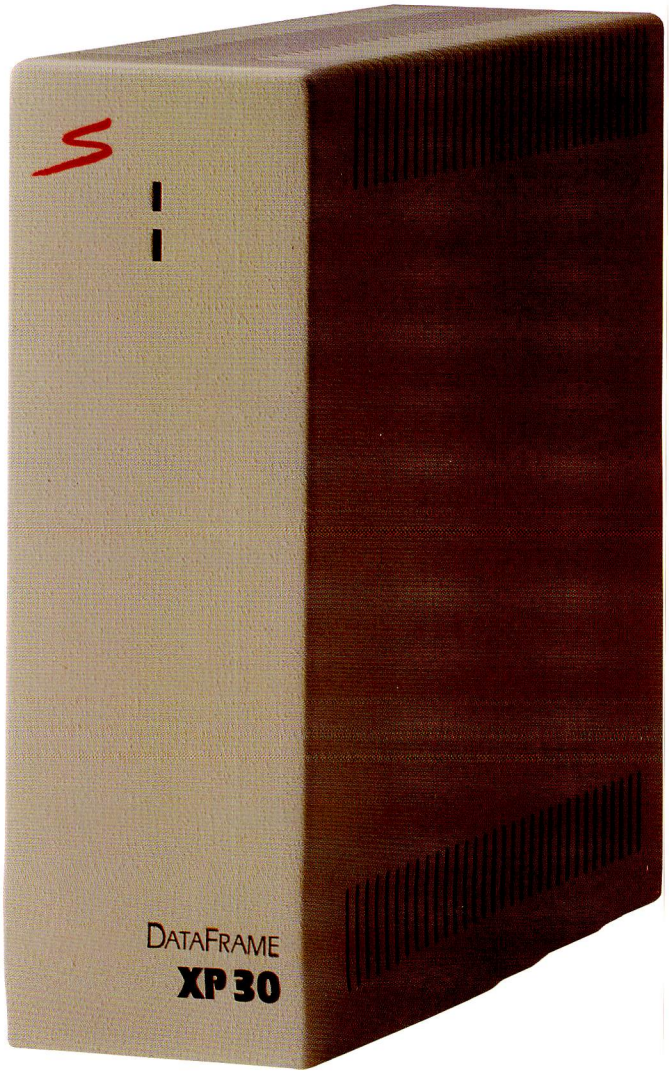
DATAFRAME User's Manual



SUPERMAC TECHNOLOGY

DATAFRAME

USER'S MANUAL

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INTRODUCTION

The DataFrame hard disk provides high-speed data storage and retrieval for owners of a Macintosh Plus, SE, II or SCSI-equipped 512K Macintosh. SuperMac has designed the DataFrame for maximum speed, reliability and ease of use. Your DataFrame comes complete with utilities software, technical support and a full one-year warranty.

The DataFrame fully complies with Apple's **SCSI** (Small Computer System Interface, pronounced "scuzzy") standards. Developed by the American National Standards Institute (ANSI), this interface allows fast and reliable data transfer among your Macintosh, DataFrame and up to six additional **SCSI devices**. A SCSI device is a hard disk or other peripheral device that conforms to SCSI standards.

About This Manual

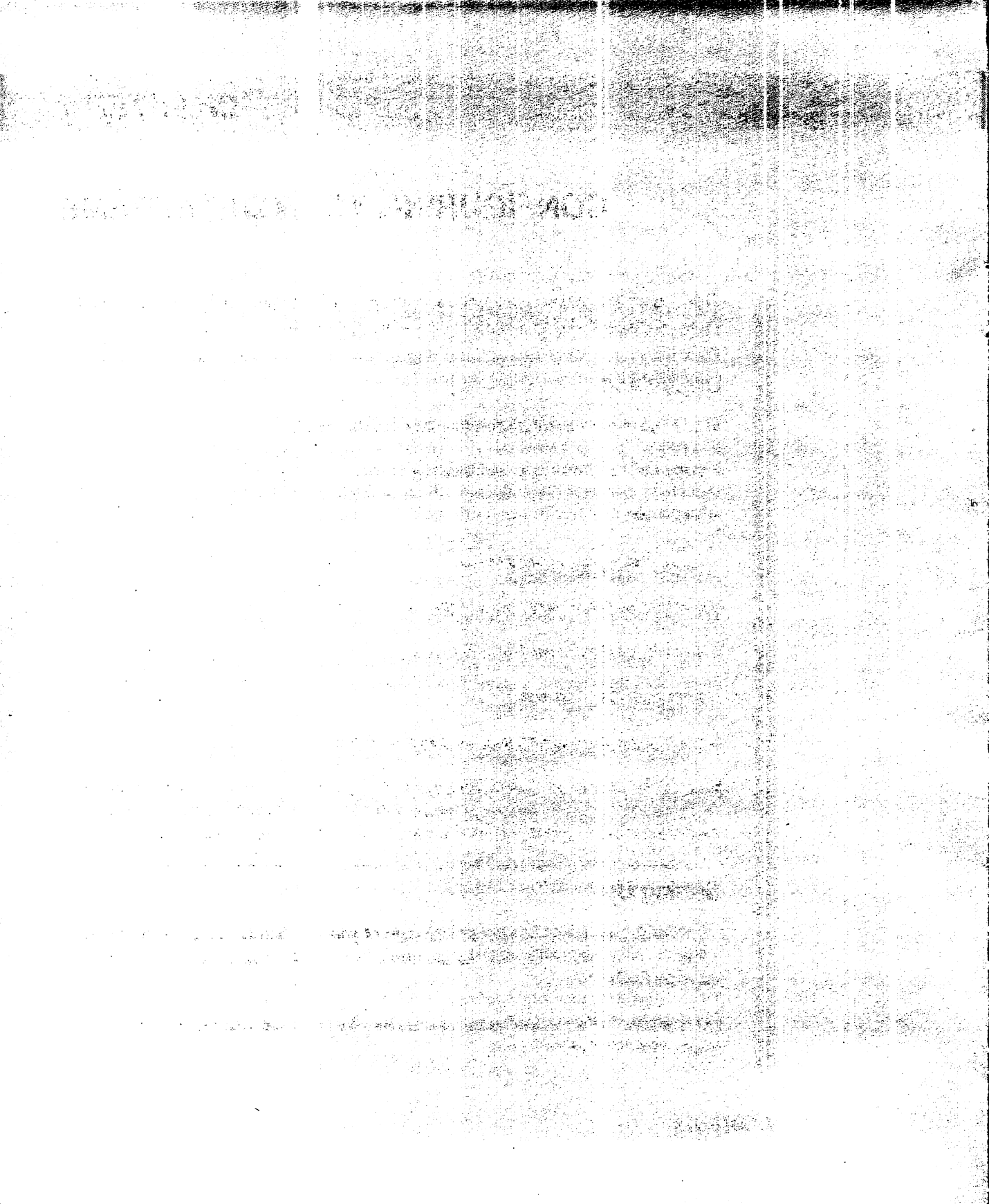
This manual describes how to configure, efficiently operate and care for your DataFrame.

Before you use your DataFrame, you should have a working knowledge of Macintosh Finder operations such as copying files, ejecting disks and launching applications. See your Macintosh owner's manual.

This manual is organized into three chapters, and includes a glossary and index.

- Chapter 1, "Configuring Your DataFrame," describes how to unpack the hard disk, set it up and connect it to a Macintosh.
- Chapter 2, "Using Your DataFrame," tells you how to install and run software applications, organize your files and care for your hard disk.
- Chapter 3, "Reference," includes troubleshooting procedures, useful tips and technical information about your hard disk.

An accompanying manual, *DataFrame Utilities User's Manual*, explains how to use the five software utilities that come with your DataFrame.



CONFIGURING YOUR DATAFRAME

This chapter tells you how to unpack and set up your DataFrame, and how to connect the SCSI cable(s) provided by your authorized SuperMac dealer.

Unpacking

In addition to this manual, the packing box should contain

- DataFrame hard disk in an antistatic bag
- power cord
- *DataFrame Utilities User's Manual*
- disk labeled *DataFrame System Software*
- disk labeled *DataFrame Utility Software*
- warranty/registration card.

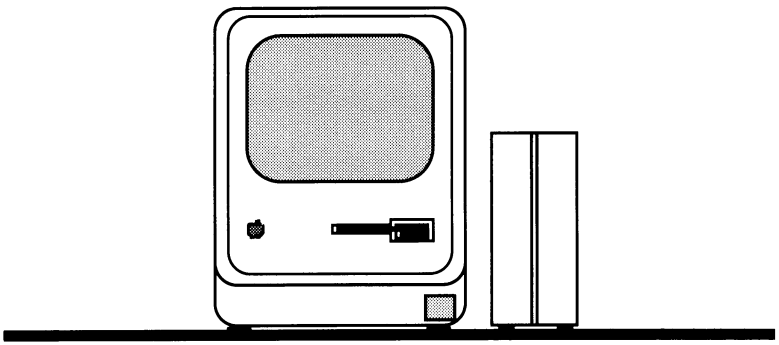
If any of these items are missing, contact your dealer.

Keep the box and all original packing materials in case you need to ship the hard disk in the future. Fill out and return the warranty/registration card to validate your one-year warranty and entitle you to receive free future utility software upgrades.

Setting Up

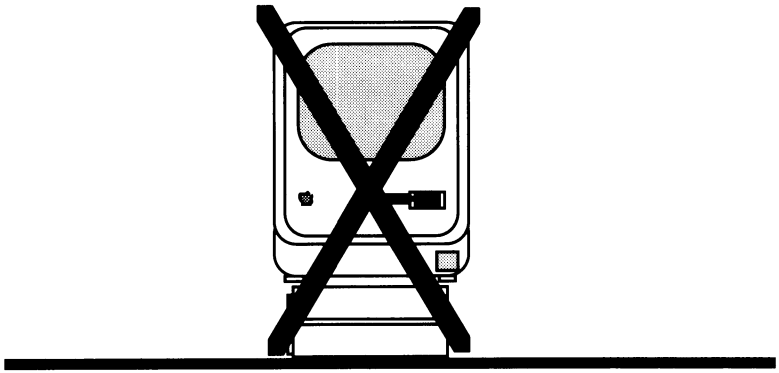
Your DataFrame should be placed to the right of your Macintosh. Set up the hard disk in a dust-free, cool, dry, well-ventilated area away from direct sunlight, heat sources and magnetic fields.

Leave at least half an inch of space between the Macintosh and your DataFrame to allow proper ventilation of both units.



DataFrame placed correctly beside Macintosh

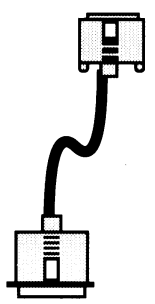
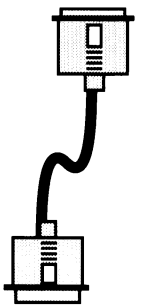
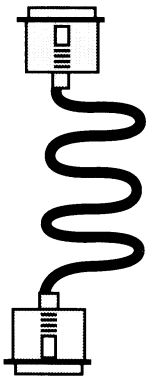
Warning: Don't put the DataFrame on its side or under the Macintosh; this may damage the hard disk or cause it to overheat. Don't obstruct the DataFrame's cooling vents by placing books or any object against or on top of the hard disk.



DataFrame not placed correctly

Selecting a SCSI Cable

You will need to purchase a cable from your authorized SuperMac dealer to connect your Macintosh and DataFrame. The type of cable you need depends on what type of Macintosh you own and where you want to place the hard disk. Your dealer will recommend the proper cable(s) for your particular configuration.

			
Cable A	Cable B	Cable C	Cable D
Macintosh-to-SCSI	SCSI-to-SCSI	3-foot extension	6-foot extension
25-pin male/ 50-pin male	50-pin male/ 50-pin male	50-pin male/ 50-pin female	50-pin male/ 50-pin female

SCSI cables and extensions

Cable A: Connects a Macintosh Plus, SE or II to a DataFrame or other SCSI peripheral device.

Cable B: Connects a SCSI-equipped 512K Macintosh to a DataFrame, or connects (chains) two DataFrames or other SCSI devices together.

Cable C: Increases the distance between two SCSI devices by 3 feet (1 meter). Must be used in combination with one cable A or cable B. Additional cables C or D can be chained for a maximum total cable length of 18 feet (6 meters).

Cable D: Increases the distance between two SCSI devices by 6 feet (2 meters). Must be used in combination with one cable A or cable B. Additional cables C or D can be chained for a maximum total cable length of 18 feet (6 meters).

Connecting Your DataFrame

The following sections describe how to connect a Macintosh Plus, SE, II or SCSI-equipped 512K Macintosh to a DataFrame.

You can leave an external disk drive or **serial hard disk** (such as Apple's Hard Disk 20) hooked up to your Macintosh's serial port when you connect your DataFrame.

Connecting a Macintosh Plus, SE or II to a DataFrame

You need cable A, a Macintosh-to-SCSI cable. Do not install a terminator on the cable. (See "Understanding SCSI Terminators" later in this chapter.)

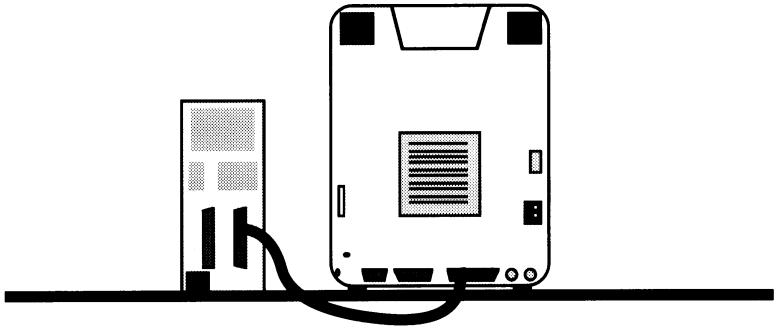
1. Start with your Macintosh and DataFrame turned off.

2. Connect the small end of the cable to the 25-pin SCSI port on your Macintosh. Tighten the thumbscrews.

3. Connect the large end of the cable to either SCSI port on your DataFrame. Secure the clips on the DataFrame.

4. Make sure the power cord is connected to a three-pronged, grounded outlet. Improper grounding may result in damage to your DataFrame.

The connection is now complete.



DataFrame correctly connected to Macintosh Plus using cable A

Connecting a SCSI-Equipped 512K Macintosh to a DataFrame

You need cable B, a SCSI-to-SCSI cable. Do not install a terminator on the cable. (See "Understanding SCSI Terminators" later in this chapter.)

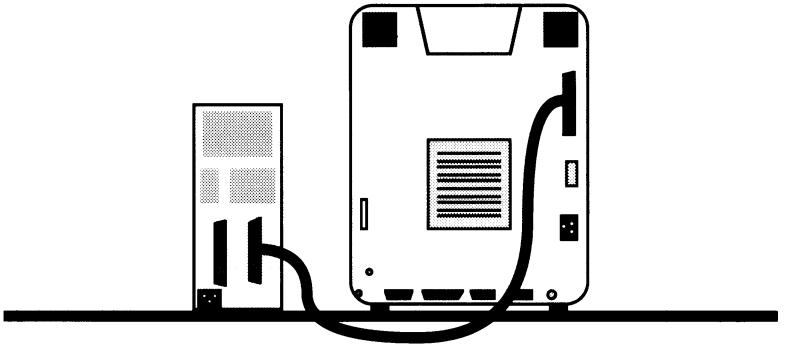
1. Start with your SCSI-equipped 512K Macintosh and DataFrame turned off.

2. Connect either end of cable B to the SCSI port on your Macintosh. Secure the clips on the Macintosh.

3. Connect the other end of cable B to either SCSI port on your DataFrame. Secure the clips on the DataFrame.

4. Make sure the power cord is connected to a three-pronged, grounded outlet. Improper grounding may result in damage to your DataFrame.

The connection is now complete.

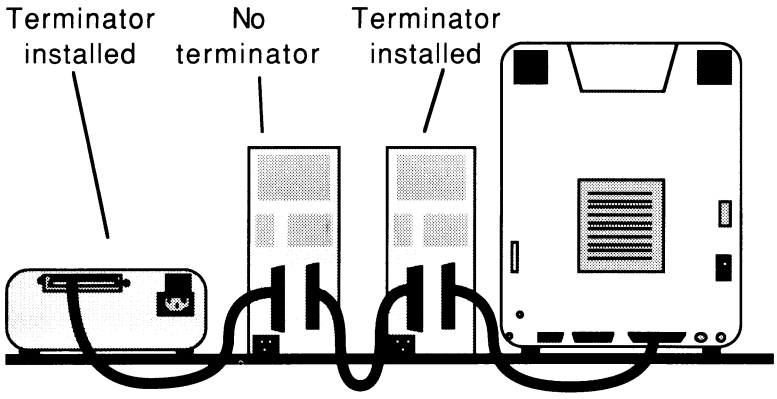


DataFrame correctly connected to a SCSI-equipped 512K Macintosh using cable B

If you are connecting two or more SCSI devices to your Macintosh (for example, a DataFrame and a tape backup unit), you need to understand what SCSI terminators and IDs are and how to use them.

Understanding SCSI Terminators

Terminators are small hardware components connected to SCSI devices or SCSI cables; they make data transfer on a SCSI network more reliable. According to SCSI requirements, you need terminators on the first and last SCSI devices **chained**, or connected to your Macintosh, and no terminators on the devices in the middle of the chain. This means that if you have two devices chained to your Macintosh, both need terminators; if you have six devices in the chain, only the first and last should have them.



Three SCSI devices chained to a Macintosh Plus (no internal SCSI hard disk)

Some SCSI devices (including DataFrames) have internal SCSI terminators, and some do not. The terminators on your DataFrame can be removed only by your authorized SuperMac dealer.

If you have a SCSI device other than a DataFrame, consult the owner's manual to determine whether it has internal terminators. If not, you can add terminators on the SCSI cable used to connect the peripheral device (if needed). If your Macintosh has an internal SCSI hard disk, it probably has terminators.

Warning: Only the first and last SCSI devices chained to your Macintosh require terminators. Install or remove terminators as necessary.

Understanding SCSI ID

A **SCSI ID** is a number between 0 and 7 assigned to a SCSI device. The SCSI ID is like a postal address; it helps the Macintosh keep track of the different devices and may determine startup priority (see "Making Your DataFrame the Startup Disk" in Chapter 2). The SCSI ID of the Macintosh, for example, is set at 7.

All SCSI devices connected to a Macintosh must have a unique SCSI ID. Since the Macintosh's SCSI ID is 7, you must set the SCSI IDs of your DataFrame and any other devices between 0 and 6. If you connect a Macintosh to two SCSI hard disks having the same SCSI ID, the hard disks will not start up and you may damage the data on the hard disks.

On some SCSI devices, including your DataFrame, the SCSI ID can be changed using software. The DataFrame SCSI ID is set at the factory at 4. To modify the SCSI ID of your DataFrame, see "Changing SCSI IDs" in Chapter 1 of the *DataFrame Utilities*

User's Manual. To determine the current SCSI ID of your DataFrame, see "Determining the SCSI ID of Your DataFrame" in Chapter 3.

Some SCSI devices require disassembly to change the ID; others have an externally mounted SCSI ID switch. Change the SCSI ID of other devices as recommended in the owner's manual.

SCSI devices have one or more **SCSI ports,** or SCSI cable connection points. The Macintosh Plus, SE and II have one 25-pin SCSI port, a SCSI-equipped 512K Macintosh has one 50-pin SCSI port and the DataFrame has two 50-pin SCSI ports.

Warning: All SCSI devices connected to your Macintosh must have a unique SCSI ID between 0 and 6.

Connecting a DataFrame and a Second SCSI Device to a Macintosh Plus, SE or II

You will need one cable A and one cable B. Make sure the SCSI ID of the second SCSI device doesn't conflict with the DataFrame's SCSI ID. See Changing SCSI IDs" in Chapter 1 of the *DataFrame Utilities User's Manual* to change the DataFrame's SCSI ID, or refer to the second SCSI device's owner's guide to change its SCSI ID.

1. Start with your Macintosh, DataFrame and second SCSI device turned off.
2. Connect the 25-pin end of cable A to the SCSI port on your Macintosh. Tighten the thumbscrews.
3. Connect the other end of cable A to either SCSI port on the DataFrame. Secure the clips on the DataFrame.
4. Connect either end of cable B to the remaining SCSI port on the DataFrame.
5. Connect the other end of cable B to either SCSI port on the second SCSI device.
6. Connect the power cords of both devices to a three-pronged, grounded outlet. Improper grounding may result in damage to your hard disks.

The connection is now complete.

USING YOUR DATAFRAME

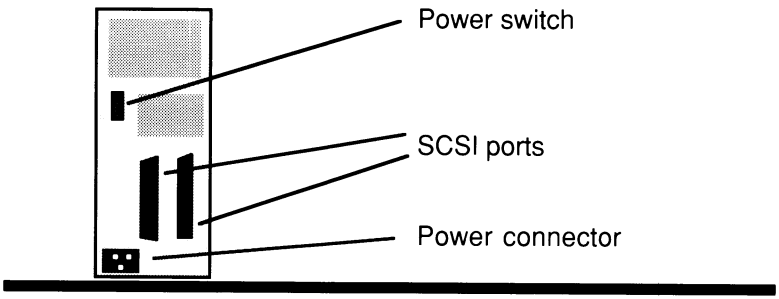
Now that you have set up and connected your DataFrame, you are ready to use it. This chapter tells you how to get started, run software, use your DataFrame efficiently and prepare the hard disk for traveling or the next day's work.

Your DataFrame already contains system and utility software. The two 3.5-inch disks shipped with the hard disk are provided as backups. Lock the disks and store them in a safe place in case you need them. They are not copy protected.

Starting Up

Once you have finished setting up your DataFrame and connecting the necessary cables, the hard disk is ready to use. Because your DataFrame has been **initialized**, or prepared to receive information, and already contains a System Folder, you can start up directly from the hard disk.

1. Turn on the DataFrame. The power switch is located on the rear panel.

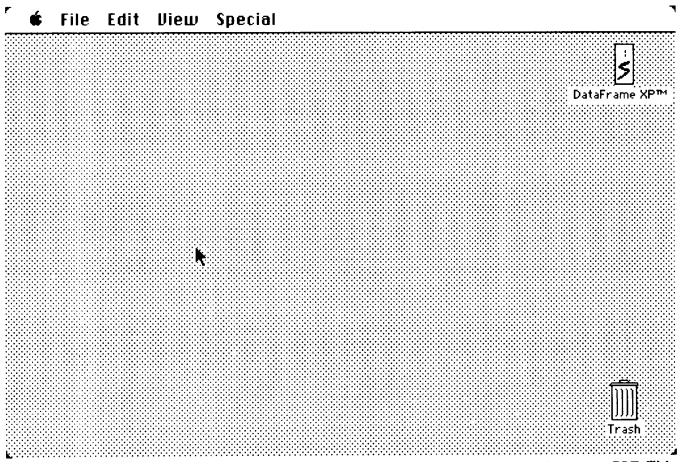


DataFrame rear panel

2. Wait 15 seconds for the hard disk to reach full speed.

3. Turn on the Macintosh. After a few moments, the Macintosh should display the startup screen; then the **desktop** should appear. The desktop is the screen on the Macintosh that contains disk icons, and allows you to organize and access your files and folders.

When the DataFrame icon appears in the upper-right corner of the desktop, startup is complete.



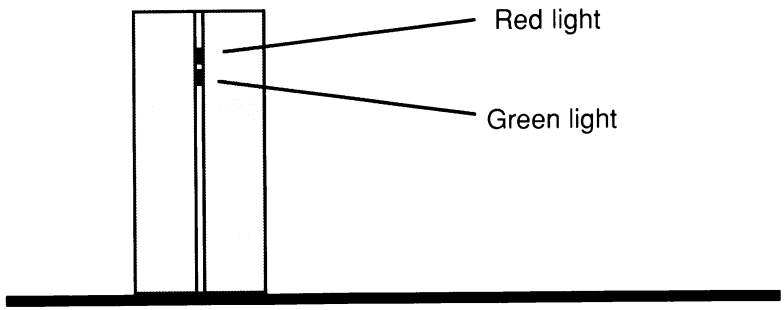
The desktop after a successful startup from a DataFrame XP™

If the desktop is not displayed, see "Troubleshooting" in Chapter 3.

Viewing the Indicator Lights

The indicator lights on the front panel tell you the hard disk's status:

- The green light glows when the hard disk is on.
- The red light flashes whenever your Macintosh is reading from or writing to the hard disk.



Indicator lights on the DataFrame's front panel

If the green light doesn't illuminate when you turn on your DataFrame, check to make sure the power cord is connected properly, or see "Troubleshooting" in Chapter 3.

Making Your DataFrame the Startup Disk

When the DataFrame icon appears in the upper-right corner of the desktop, the DataFrame is the **startup disk**, meaning the disk containing the System and Finder currently being used by your Macintosh. If the DataFrame icon appears *below* another disk icon on the desktop, then the DataFrame is not the startup disk.

If you plan on running most of your **applications** (programs such as MacWrite and Excel) from your DataFrame, and you want to take advantage of the DataFrame's speed and ability to store many desk accessories and fonts, you will want to make it the startup disk every time you use it.

You can make your DataFrame the startup disk every time by

- ejecting any 3.5-inch disks before turning on the Macintosh
- removing the System Folder from any serial hard disks (such as Apple's Hard Disk 20) attached to your Macintosh
- assigning your DataFrame a SCSI ID higher than that of any other attached SCSI device (see "Changing SCSI IDs" in Chapter 1 of the *DataFrame Utilities User's Manual*), or removing the System Folder from any attached SCSI device with a SCSI ID higher than the DataFrame's.

Note: If you are using a Macintosh SE or II with System version 4.1 or later, you can override the normal startup priorities and make the DataFrame the startup disk using the Control Panel. See "Using the Control Panel" in the Macintosh SE or II owner's guide for complete instructions.

Installing Applications on Your DataFrame

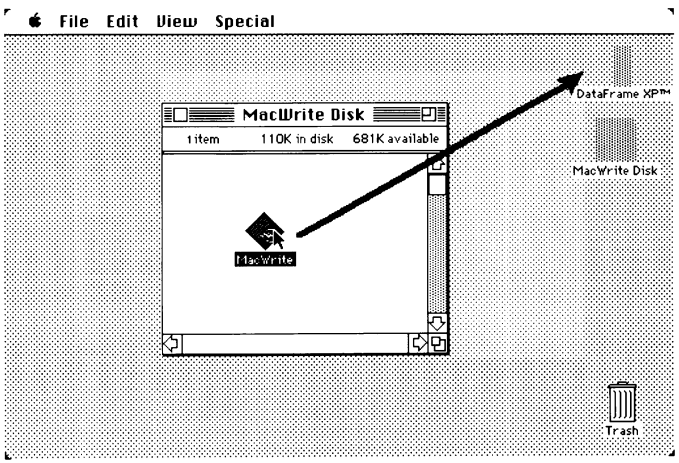
You can quickly and easily install most software applications (except certain copy-protected ones) on your DataFrame by dragging their icons from a 3.5-inch disk to the DataFrame icon.

For example, follow these steps to install MacWrite, a word processing application:

1. Turn on your DataFrame, wait 15 seconds, then turn on your Macintosh. Wait until the desktop appears.

2. Insert a disk containing MacWrite. The icon for the MacWrite disk should appear on the desktop. Double-click on it to open its window.

3. Click once on the MacWrite icon to select it and then drag it to the DataFrame icon. Release the mouse button when the DataFrame icon becomes highlighted.



MacWrite dragged to DataFrame icon

4. After a few moments, a dialog box will appear informing you that copying is in progress. The copy is complete when the dialog box disappears.

5. Drag the icon for the MacWrite disk to the Trash. The disk will be ejected.

For a more complete explanation of copying with the Finder (the process just described), see your Macintosh owner's guide.

Warning: Your DataFrame will operate best with one System and Finder on it. Placing duplicates of either of these files your hard disk may make it act strangely. Avoid potential problems by putting only one System and Finder on your DataFrame.

Installing Copy-Protected Applications

Although many software developers no longer **copy protect** – or make it difficult to duplicate – their applications, some still do. Installing some copy-protected applications on your DataFrame may cause damage to your data unless you remove the copy protection first.

Avoid using installation utilities that *don't* remove the copy protection from your application, because they may not work properly with SCSI hard disks. Ask your

software dealer or local user's group about purchasing a utility to remove an application's copy protection.

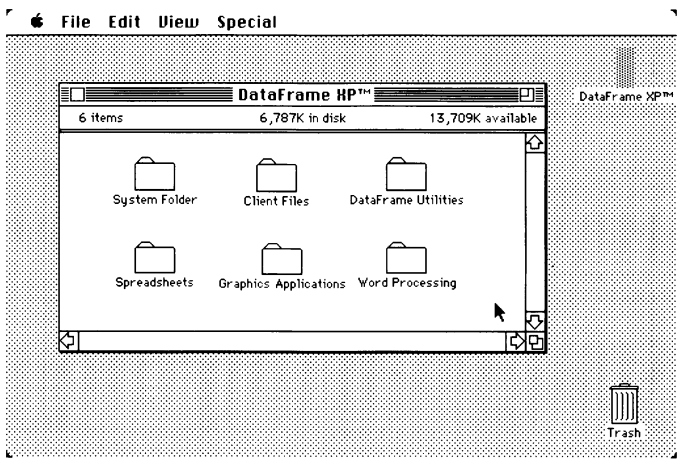
Running Software

Your DataFrame operates like a giant, high-speed 3.5-inch disk. Once you have installed applications on your DataFrame, you can launch them, copy files and create new documents, just the way you did with 3.5-inch disks. However, you will benefit from the DataFrame's higher speed and increased data storage capacity.

All software that conforms to Apple's guidelines will work with your DataFrame.

Organizing Your Desktop

Organize your files in folders to avoid searching through a cluttered desktop, and to allow folders to open quickly. You can create folders by choosing New Folder from the File menu. Move an application, file or folder into a new folder by dragging its icon into the new folder. See your Macintosh owner's guide for more information on organizing documents.



A well-organized desktop

Adding Fonts and Desk Accessories

Your DataFrame contains much more storage space for fonts and desk accessories (or "DAs") than a 3.5-inch disk does. Use the Font/DA Mover supplied on the *DataFrame System Software* disk, or the version that was designed for use with your System file, to

install fonts and desk accessories. Refer to your Macintosh owner's guide, or the on-line help available after launching the Font/DA Mover, to use this utility.

Warning: You may corrupt your System file if you install fonts or desk accessories using an outdated version of the Font/DA Mover. If in doubt, ask your authorized SuperMac dealer for a version of the Font/DA Mover compatible with your System file.

Warning: Some untested public domain desk accessories may damage the software on your DataFrame. Thoroughly test any questionable desk accessories by installing and using them on a 3.5-inch disk containing a System and Finder. If in doubt, ask your software dealer or local user's group for advice.

Developing Good Backup Habits

The DataFrame has been designed for maximum reliability. Occasionally, however, any hard disk may become unreadable due to software corruption or other factors. You can prevent the potential crisis of losing your valuable files forever by **backing up** – or making a duplicate copy of the contents of – your hard disk frequently.

There are two reasons to back up: to preserve data and to save time. Your data files may contain information that is difficult, time-consuming or even impossible to reproduce. For this reason, you should back up your data files every time you make significant changes to their contents. For especially important data, you might consider keeping a backup off-site in a vault or safety deposit box.

It takes time to configure your hard disk with your favorite applications, desk accessories, fonts and documents. By backing up your entire hard disk regularly, you can avoid having to reinstall your applications and files should the disk become unreadable.

Your DataFrame comes with DiskFit, a backup utility designed to simplify and speed up the backup process. DiskFit makes it easy to back up your entire hard disk or selected files onto a set of 3.5-inch disks or onto a second hard disk.

With DiskFit you can make a fast **incremental backup**, meaning a backup of only whatever has changed on your hard disk since the last backup. With DiskFit it takes only a few minutes a day to bring your backup disks up to date so that they contain the same information as your DataFrame. For more information, see "DiskFit" in Chapter 2 of the *DataFrame Utilities User's Manual.*

Ask yourself this question: If my hard disk failed today, would I be able to retrieve all the information from my backups quickly? If you can confidently answer yes, then you have backed up adequately.

Shutting Down Your DataFrame

When you have finished a session with your Macintosh and DataFrame, don't turn either of them off until you choose **Shut Down** from the Special menu. The Shut Down command gives the Macintosh an opportunity to complete any Finder operations. After a shut down, your data is protected and your DataFrame is ready for a fast startup.

You can park the **drive heads** during a shut down. The drive heads are the parts of the hard disk mechanism that write to and read from the disk. **Parking** the drive heads moves them away from critical data storage areas, reducing the chance that damage or loss of data will occur if the hard disk is moved.

Follow these steps to shut down:

1. Return to the desktop by quitting any active applications.
2. Choose Shut Down from the Special menu.

   If you want to park the drive heads, hold down the Option key while you choose Shut Down. The drive heads will be parked automatically.

   Disks in the internal and external drives will be ejected at this point.

The Shut Down command

3. A dialog box will appear informing you that you can switch off your computer.
4. Switch off the Macintosh and the DataFrame.

The shut down is now complete.

Handling Your DataFrame

- If desired, clean the metal case of your DataFrame with a damp cloth.
- Transport your DataFrame in a padded carrying case (available from your authorized SuperMac dealer), in the top section of most carrying cases designed for the Macintosh Plus or in the original DataFrame packing box.
- To avoid damaging the hard disk mechanism, never move or jar your DataFrame while it is on.
- Avoid unplugging or turning off your DataFrame while the red light is blinking. This may damage the hard disk and lead to data loss.

Traveling With Your DataFrame

- Before transporting your DataFrame, you need to park the drive heads to ensure data safety. See "Shutting Down" in this chapter, or see "Parking the Drive Heads" in Chapter 1 of the *DataFrame Utilities User's Manual.*
- If you plan to ship a DataFrame by surface or air, use the original box and packing materials. You can check the packing box as luggage on most flights.
- You can pass your DataFrame safely through x-ray machines at most American airports. When traveling overseas, you may want to have the hard disk hand-inspected.
- Your DataFrame can be converted to run on 220 volts AC. To configure your DataFrame for 220 volts, contact your authorized SuperMac dealer or call SuperMac technical support at (415) 964-9660. You may also need a new power cord or an adapter that lets you plug the 110-volt power cord into a 220-volt outlet.

REFERENCE

Troubleshooting

This section discusses some common problems encountered in using a DataFrame. If you are unable to solve a problem yourself, contact your authorized SuperMac dealer or call SuperMac technical support at (415) 964-9660 for assistance.

Problem: My Macintosh and DataFrame are turned on but the Macintosh won't start up.

In many cases you can get your Macintosh to start up by following these four steps:

1. Turn off the Macintosh and DataFrame.

2. Disconnect the SCSI cable between the Macintosh and the hard disk. Flex the cable a few times. Reconnect the cable, making sure you have secured the clips on the hard disk and have tightened the thumbscrews on the Macintosh.

   Be sure the SCSI cable isn't forced against a wall or otherwise kinked. If you suspect you have a faulty cable, contact your authorized SuperMac dealer for replacement.

3. Turn on the DataFrame and wait 15 seconds. This will allow the hard disk to reach full speed.

4. Turn on the Macintosh. If the startup screen does not appear, continue to the steps below.

The following steps show you how to start up your Macintosh from the *DataFrame System Software* disk and take actions to get your DataFrame working again. Once you start up from the *DataFrame System Software* disk, three things can happen. Your next step will depend upon what appears on the Macintosh's screen.

1. Turn off the Macintosh and DataFrame.

2. Turn on the DataFrame and wait 15 seconds.

3. Insert the *DataFrame System Software* disk in the internal or external disk drive.

4. Turn on the Macintosh.

5. When the smiling Macintosh icon appears, hold down the mouse button. This will force the Macintosh to try to mount the DataFrame icon on the desktop.

6. Once the desktop appears, you can release the mouse button. One of three situations should occur:

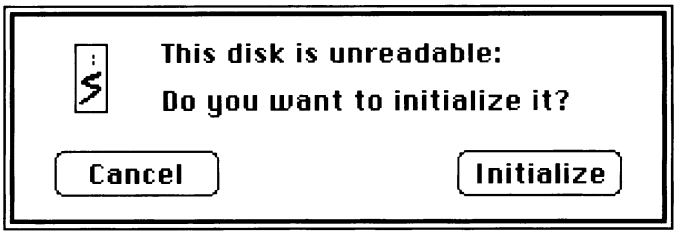
   A. The DataFrame icon appears below the *DataFrame System Software* disk icon.

      Replace the DataFrame's System and Finder. See "Replacing the System and Finder" later in this chapter.

   B. The DataFrame icon does not appear on the desktop.

      Try replacing the driver. See "Installing a New Driver" in Chapter 1 of the *DataFrame Utilities User's Manual.* If successful, then choose Quit and Restart. If not successful, contact your authorized SuperMac dealer or call SuperMac technical support at (415) 964-9660.

   C. The following dialog box appears:



      Click Cancel.

      If you have critical information on the DataFrame that is not backed up, take the hard disk to your dealer. The dealer may be able to recover the data on the hard disk.

      If you have backed up your data, try initializing your DataFrame and restoring your files. See "Initializing Your DataFrame" in Chapter 1 of the *DataFrame Utilities User's Manual* and "Restoring the Files on a SmartSet to Your DataFrame" in Chapter 2 of this manual.

Problem: The indicator lights on my DataFrame don't flash or glow when I turn it on.

Remove the power cord from your DataFrame and reconnect it. Plug the other end into a live, grounded AC power outlet. If the lights still don't flash or glow, contact your authorized SuperMac dealer or call SuperMac technical support at (415) 964-9660.

Problem: My DataFrame starts up but crashes often and acts strangely.

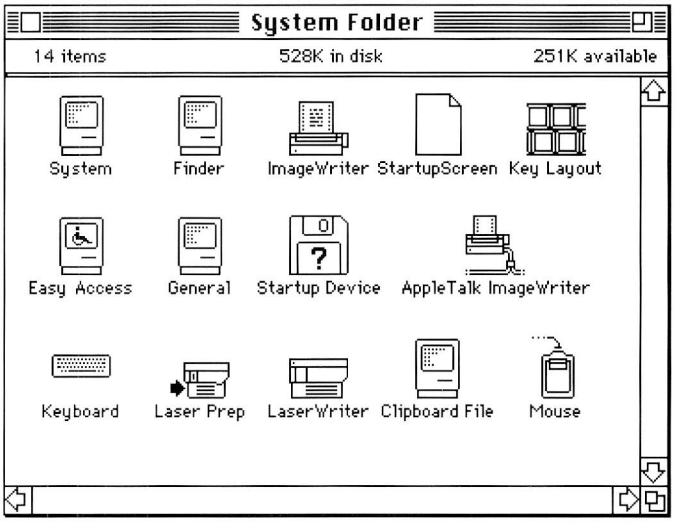
- Rebuild the desktop. See "Rebuilding the Desktop" later in this chapter.
- Be sure you only have one System and Finder on your DataFrame. Use the Find File desk accessory to locate additional Systems and Finders. If you find additional Systems and Finders, throw them in the Trash and rebuild the desktop. See "Rebuilding the Desktop" later in this chapter.
- Locate your System and Finder files. Select both icons and drag them onto the desktop (not into another folder). Then drag both icons back to the System Folder.
- Replace your System and Finder. See "Replacing the System and Finder" later in this chapter.
- Test the hardware components. See "Testing DataFrame Hardware" in Chapter 1 of the *DataFrame Utilities User's Manual.*
- Use DiskFit to create a SmartSet containing documents only, initialize your DataFrame, reconfigure it with a System Folder and applications, and restore the documents on your SmartSet. See "DiskFit" in Chapter 2 of the *DataFrame Utilities User's Manual* and "Initializing Your DataFrame" in Chapter 1 of the *DataFrame Utilities User's Manual.*

Problem: I have a DataFrame and a second SCSI hard disk. When I turn the Macintosh and the hard disks on, the indicator lights on both hard disks blink but I get no startup screen.

- Check to make sure that both devices have unique SCSI IDs. See "Understanding SCSI ID" in Chapter 1. To check the SCSI ID of your DataFrame, see "Determining the SCSI ID of Your DataFrame" later in this chapter.
- Check to be sure you have installed or removed terminators where necessary. The first and last SCSI devices in a chain need to have terminators, and any devices in the middle of a chain should not have them. See "Understanding SCSI Terminators" in Chapter 1.

Replacing the System and Finder

Replace the System and Finder when recommended in "Troubleshooting" or if Apple has announced a system software update and your authorized SuperMac dealer recommends upgrading.



Files in the System Folder

When you replace the System, the fonts and desk accessories in your existing System file will be lost. Use the Font/DA Mover to make a backup copy of the fonts and desk accessories in your existing System file before you replace it.

Warning: Your DataFrame will operate best with one System and Finder on it. Placing duplicates of either of these files on your hard disk may make it act strangely. Avoid potential problems by putting only one System and Finder on your DataFrame.

Follow these steps to replace the System and Finder:

1. Start with your Macintosh and DataFrame turned off.

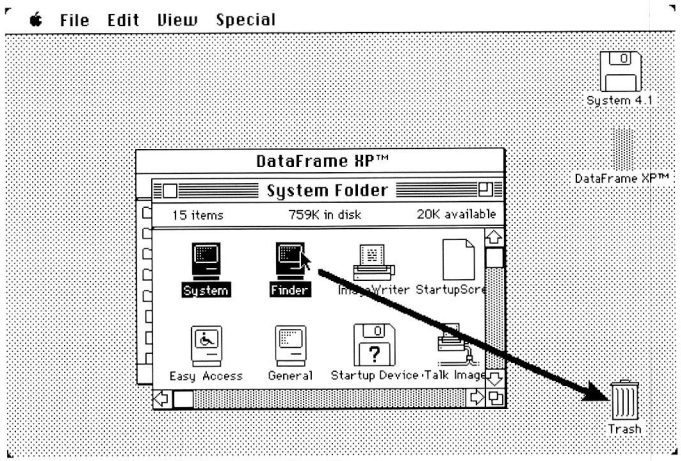
2. Insert the *DataFrame System Software* disk (or any disk containing the most recent version of the System and Finder).

3. Turn on your DataFrame, then your Macintosh.

   The Macintosh should start up from the *DataFrame System Software* disk. The DataFrame icon should appear below the icon of the startup disk.

4. Open the DataFrame's System Folder.

5. Select the System and Finder icons and drag them to the Trash as shown in this screen:



System and Finder dragged to Trash

Two dialog boxes to confirm the delete operation will appear. Click OK for both dialog boxes.

6. Open the startup disk's System Folder.

7. Select the System and Finder icons on the startup disks and drag them to the DataFrame's System Folder.

   A dialog box indicating copying in progress should appear, then disappear when copying is complete.

8. Select Restart from the Special menu. The Macintosh should eject the 3.5-inch disk and start up from the DataFrame. If your DataFrame does not start up, see "Troubleshooting" earlier in this chapter.

Now that you have replaced your System and Finder, check to see if the 3.5-inch startup disk you used also contains the latest versions of the printer drivers and other system software files. If so, you should copy them to your DataFrame's System Folder. This will ensure that your DataFrame contains compatible system software files. Refer to your Macintosh owner's guide or ask your authorized SuperMac dealer for instructions.

Rebuilding the Desktop

Rebuilding the desktop updates the Macintosh's desktop file and may speed up Finder operations. Rebuild the desktop when recommended in "Troubleshooting." This will not damage the data on the hard disk.

The following steps tell you how to rebuild the desktop after a Restart command. You don't need to restart your Macintosh to display the dialog box to rebuild the desktop. You can display the dialog box by holding down the Command and Option keys while quitting from any application.

1. Make the Finder the startup application by clicking on the Finder icon and selecting Set Startup from the Special menu.

2. Choose Restart from the Special menu.

3. Hold down the Option and Command keys while the DataFrame starts up.

4. The following dialog box should appear:

5. Click OK.

   Rebuilding the desktop may take a few minutes. When the DataFrame icon appears on the upper-right corner of the desktop, the operation is complete.

Rebuilding the desktop is now complete.

Determining the SCSI ID of Your DataFrame

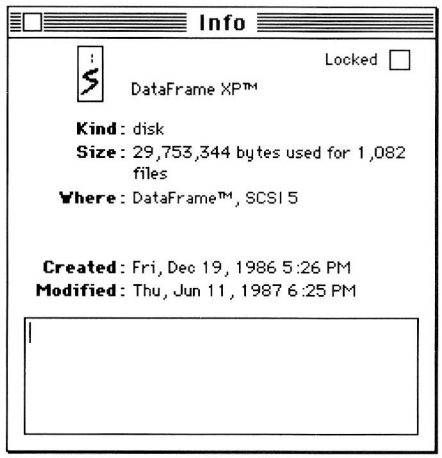
The DataFrame has a built-in feature that makes it easy to find out its SCSI ID. It's important to know the SCSI IDs of all SCSI devices that you are connecting together. You should not chain them unless you are sure that they all have different SCSI IDs. See "Understanding SCSI ID" in Chapter 1 for more information about chaining SCSI devices.

Note: You can also determine the SCSI ID of the hard disk by running Manager. See "Changing SCSI IDs " in Chapter 1 of the *DataFrame Utilities User's Manual.*

Once you find out the SCSI ID of your hard disk, you may want to write it down on a piece of paper and attach it to your hard disk for quick reference.

Follow these steps to find out the SCSI ID of your DataFrame:

1. Quit any active applications and return to the desktop.
2. Click on the DataFrame icon to select it.
3. Choose Get Info from the File menu. The following dialog box should appear:



The SCSI ID appears near the middle of the dialog box, after the "**Where:**" field.

You have now determined the SCSI ID of the DataFrame.

Frequently Asked Questions

This section answers questions frequently asked by DataFrame owners. If you have additional questions, please contact your authorized SuperMac dealer or call SuperMac technical support at (415) 964-9660.

Q: My DataFrame has two SCSI ports. Can I connect two Macintoshes to it at once?

A: No. Your DataFrame has two ports so that you can chain additional SCSI devices to it.

Q: Which SCSI port on the DataFrame should I use to connect my Macintosh?

A: It doesn't make any difference. Use either SCSI port.

Q: Can I share my DataFrame on a network with two or more Macintoshes?

A: Yes. Use a file or disk server such as Apple's AppleShare or Centram Systems West's Tops. Ask your authorized SuperMac dealer for more information.

Q: Sometimes my DataFrame takes a long time to start up, especially after a system crash. Why?

A: If a program crashed or if there was a power failure, your DataFrame must go through a series of diagnostics to verify the integrity of the disk. To ensure a faster startup, end each work session by choosing the Shut Down command from the Special menu. See "Shutting Down" in Chapter 2.

Q: Is my DataFrame compatible with other Macintosh SCSI devices?

A: Yes, assuming the other devices also adhere to Apple's standards. SCSI devices that don't conform to Apple's standards, or that use specially modified system software, may not work properly with the DataFrame.

Q: My desk is crowded and the noise of the DataFrame bothers me. Can I put the hard disk on the floor?

A: Yes. You can purchase 3-foot (1-meter) extension cables (cable C) or 6-foot (2-meter) extension cables (cable D), and place your DataFrame on the floor up to 18 feet (6 meters) away from the Macintosh. These extension cables are available from your authorized SuperMac dealer. Make sure that the DataFrame is not placed where it could be accidentally kicked or bumped, and that the hard disk has adequate ventilation.

Q: Should I leave my DataFrame turned on all the time, or turn it off each time I've finished using it?

A: It's up to you. The DataFrame is capable of running 24 hours a day, 7 days a week. If the cleaning service in your office might accidentally run a vacuum over the power cord, or if the air conditioning (or heat) in your building is turned off on weekends, it's a good idea to shut down the DataFrame at the end of the day.

Q: Can I install copy-protected software on the DataFrame?

A: Yes. Refer to "Installing Copy-Protected Applications" in Chapter 2.

Q: Can I connect a DataFrame to my 512K Macintosh?

A: Not without upgrading your 512K Macintosh to a 512K Enhanced Macintosh and purchasing an Apple-compatible SCSI port. You can upgrade to a 512K Enhanced Macintosh by purchasing Apple's Internal 800K Disk Drive Upgrade Kit from your Apple dealer. You can purchase a SCSI port upgrade, such as SuperMac's DataPort™ or Enhance™, from your authorized SuperMac dealer.

Q: I've used my DataFrame for a few months and it is nearly full. It seems to run much more slowly now. Why, and what can I do to speed it up?

A: As you add more and more files to the hard disk, it can become fragmented. Fragmentation occurs when large files get written to more than one place on your DataFrame.

One way to unfragment your DataFrame is to back up, initialize and restore. Back up your files using DiskFit (see "DiskFit" in Chapter 2 of the *DataFrame Utilities User's Manual*). Next, initialize using the latest version of the Initializer available from an authorized SuperMac dealer (see "Initializing Your DataFrame " in Chapter 1 of the *DataFrame Utilities User's Manual*). Then restore your files from the DiskFit SmartSet (see "Restoring the Files on a SmartSet to Your DataFrame" in Chapter 2 of the *DataFrame Utilities User's Manual*). The files will be written to your DataFrame contiguously; that is, unfragmented.

Q: Where can I get DataFrame utility software upgrades?

A: Ask your authorized SuperMac dealer, or download them from CompuServe, Delphi or GEnie information services. All DataFrame utility software upgrades are free.

Q: Will using my DataFrame affect radio or television reception?

A: No. The DataFrame conforms to FCC Class A standards. See the FCC notice later in this chapter.

Q: Can I use my DataFrame outside the U.S.?

A. Yes. The DataFrame's durable construction and padded carrying case make it well suited for traveling. Be sure to park the drive heads before transporting the hard disk (see "Shutting Down" in Chapter 2).

Your DataFrame can be converted to run on 220 volts AC. To configure your DataFrame for 220 volts, contact your authorized SuperMac dealer or call SuperMac technical support at (415) 964-9660. You may also need a new power cord or an adapter that lets you plug the 110-volt power cord into a 220-volt outlet.

Technical Specifications

HARD DISK	XP 30	XP 60	XP 105	XP 150
Transfer rate (Mbits/sec)	7.5	7.5	7.5	10
Track-to-track access time	35 msec	5 msec	5 msec	4 msec
Average access time	65 msec	28 msec	28 msec	16.5 msec
Rotational Speed	3600 rpm	3600 rpm	3600 rpm	3600 rpm

SCSI CONTROLLER	
Peak transfer rate	1.5 Mbytes/sec
Sustainable transfer rate	625 Kbytes/sec
SCSI ID	software-selectable
Logical block size	512 bytes

OPERATING ENVIRONMENT	
Shock rating	10 g, 11 ms
Room temperature range	40–90° F
Humidity	8–80%
Altitude	0–25,000 ft

NONOPERATING ENVIRONMENT	
Shock rating	40 g, 11 ms
Temperature range	-40–140° F
Humidity	8–80%
Altitude	0–40,000 ft

POWER	
50 or 60 Hz, selectable 110/220 volts AC	
Maximum power dissipation	60 watts

FCC Notice

Warning

The equipment described in this manual has been certified to comply with the limits for Class A computer devices, pursuant to subpart J of Part 15 of FCC rules. Only computers and other peripherals (disks, tape drives, etc.) may be attached to this equipment. Operation with noncertified equipment is likely to result in interference to radio and television reception. It is suggested that other equipment be used with shielded grounded cables, with in-line filters if necessary.

Instructions to Users

This equipment generates and uses radio frequency energy and if not installed and used properly, i.e. in accordance with the operating instructions and service manual, may cause interference to radio and television reception. It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in residential installations.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient the receiving antenna.
2. Relocate the equipment with respect to the receiver.
3. Move the equipment to or away from the receiver.
4. Plug the equipment into a different outlet so that the equipment and receiver are on different branch circuits.
5. Ensure that the shielded SCSI cables are properly secured.

If necessary, consult your dealer's service representative or SuperMac Technology for additional suggestions.

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of the DataFrame. It is the responsibility of the user to correct such interference.

GLOSSARY

application: A software program used to create or manipulate data. For example, MacWrite, Excel.

backup: A copy of the files on a disk. It's a good idea to use DiskFit to copy the files on your DataFrame regularly, and to keep the backup disks in a safe place. See also **incremental backup, SmartSet**.

copy protection: Software modifications that prevent you from making a functional duplicate of an application.

desk accessories (or DAs): "Mini-applications" that are available on the Apple menu from within most applications. Examples are Scrapbook, Print Queue and Alarm Clock.

desktop: The screen that appears after your Macintosh has started up, showing your disks, folders and files. You can launch applications, create new folders and reorganize files from the desktop. See also **Finder**.

disk: An storage medium that can record files, folders and other information. 3.5-inch disks store up to 800K of data and are used in the Macintosh internal and external disk drives. See also **hard disk**.

document: A file you create with a Macintosh application. For example, a letter in MacWrite.

drive heads: The parts of the hard disk mechanism that write to and read from the disk. See also **parking.**

driver: Software that allows the Macintosh to communicate with a peripheral device.

file: A named collection of information stored on a disk, usually represented by an icon on the desktop. For example, a document, an application, the System and Finder.

Finder: The application that manages the Macintosh desktop operations. The Finder allows you to copy files, launch applications, create new folders and more. See also **desktop**.

folder: An electronic metaphor for manila folders. A folder resides on the desktop and helps you keep your files and applications organized in a logical hierarchy.

hard disk: A device that stores information on a rigid platter covered with a magnetic medium spinning at high speeds. Hard disks can store much more information than 3.5-inch disks, and perform much faster. For example, your DataFrame.

icon: A graphic representation of a hard disk, 3.5-inch disk, folder, file, or other resource that appears on the desktop. For example, the MacWrite icon, the DataFrame icon, the Trash icon, the System Folder icon.

incremental backup: The process of backing up only whatever has changed on your hard disk since the last backup. After an incremental backup using DiskFit, the contents of your SmartSet backup disks will be identical to the contents of your hard disk. See also **SmartSet**.

initialize: To completely erase the data on a disk, and to prepare a disk to store data.

parking: Moving the drive heads away from critical data storage areas on a hard disk. See also **drive heads**.

queue: A list of spooled files created by SuperSpool or SuperLaserSpool that await printing. You can see and modify the queue from the Print Queue or Laser Queue desk accessory. See also **spooled file**.

Restart: A Finder command available on the Special menu that ejects any 3.5-inch disks, completes any Finder operations, and restarts the Macintosh.

restore: To copy backup files to hard disk. DiskFit's Restore command copies all the files from a SmartSet to a DataFrame. See also **SmartSet**.

SCSI: Small Computer System Interface, pronounced "scuzzy." A set of hardware and software specifications allowing certain hard disks and other peripheral devices to transfer data to and from the Macintosh quickly and reliably. The DataFrame uses this interface.

SCSI device: A hard disk or other hardware device that conforms to the SCSI standards set by ANSI (American National Standards Institute). For example, the DataFrame.

SCSI ID: A number between 0 and 7 assigned to a SCSI device that distinguishes it from other SCSI devices.

SCSI port: The SCSI cable connection point on the back of your Macintosh or SCSI device. The Macintosh has a 25-pin SCSI port; the DataFrame has two 50-pin SCSI ports.

serial hard disk: Any non-SCSI hard disk that connects to the serial port of the Macintosh. For example, Apple's Hard Disk 20.

Shut Down: A Finder command available on the Special menu that ejects any 3.5-inch disks, completes any Finder operations, and prepares the Macintosh and DataFrame for turning off.

SmartSet: A set of 3.5-inch disks or other volumes containing a backup of your DataFrame as created by DiskFit.

spool: To intercept a print file on its way to the printer and reroute it to disk, where it's saved as a **spooled file** and held until the printer is ready for it. SuperSpool and SuperLaserSpool spool documents quickly, and give you access to your Macintosh while documents print.

spooled file: A file created by SuperSpool or SuperLaserSpool that contains all of the information needed to print a document. See also **spool.**

startup application: The application that is launched automatically every time you start up your Macintosh. You can specify the startup application from the desktop by clicking the desired application and choosing Set Startup from the Special menu.

startup disk: The disk that contains the System and Finder currently used by the Macintosh. The startup disk's icon usually appears on the upper-right corner of the desktop.

System Folder: A folder containing the System, Finder and system software files.

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